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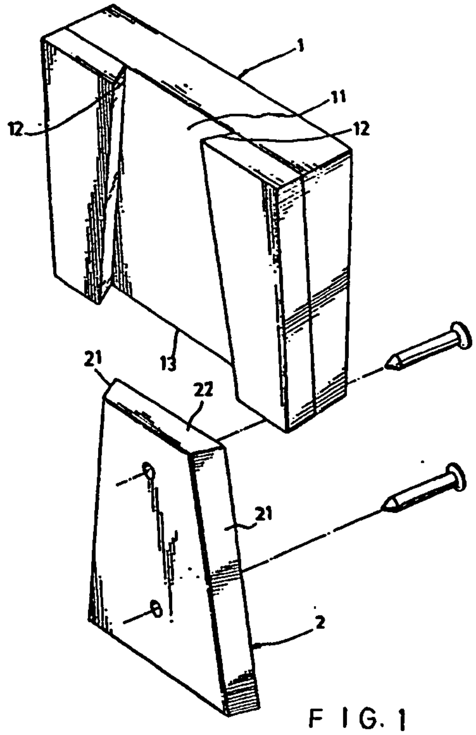
(54) Dovetailed joint positioning means

(57) A dovetailed joint for suspending an article from a wall includes a dovetailed positioning plate 2 and a grooved matching plate 1, wherein the plate 2 comprises two side walls 21 respectively slanting outward, and the plate 1 provides a groove 11 with two side walls slanting inward to serve as retainer means to hold the plate 2. For suspending a heavier article (Fig 4 two blocks on a positioning plate define a dovetail channel to receive) two complementary blocks on the article.



F I G. 1

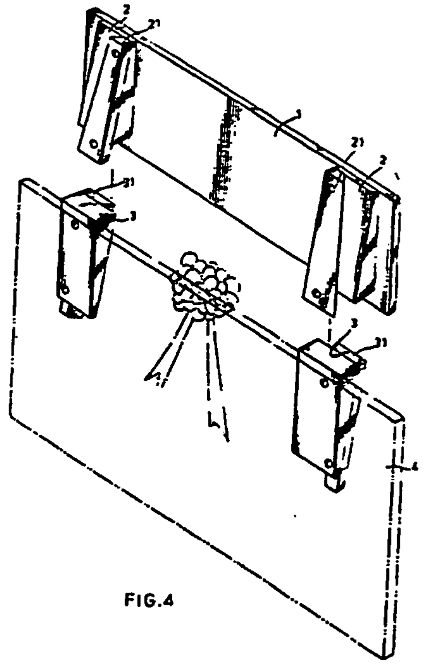


FIG.4

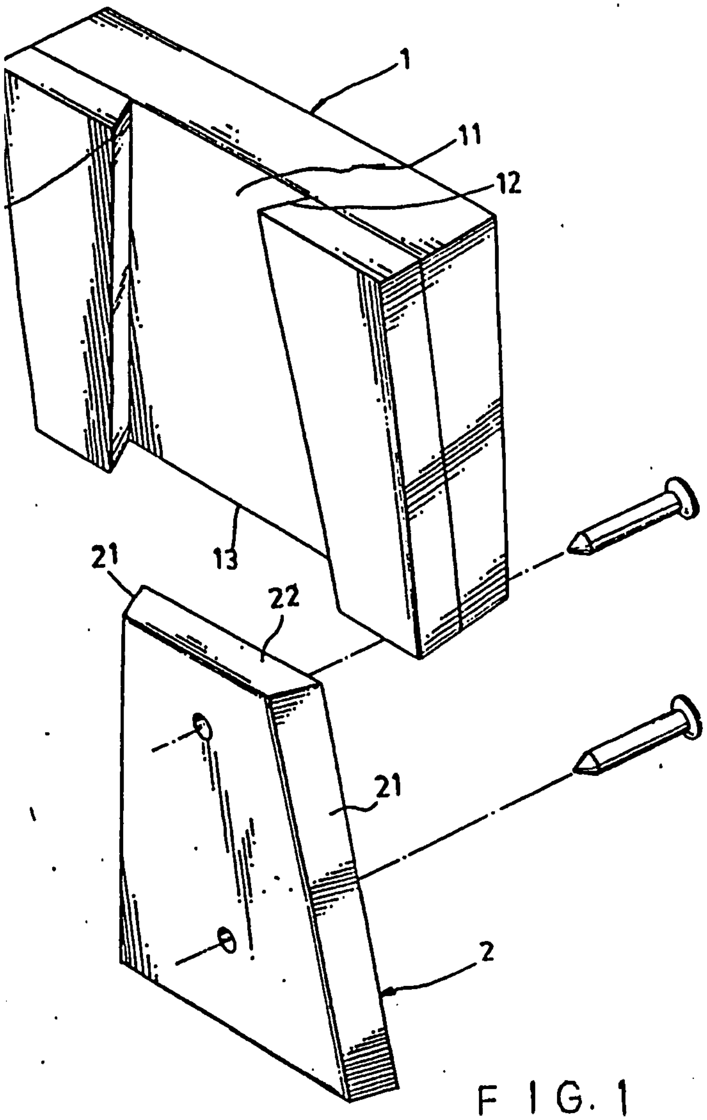


FIG.1

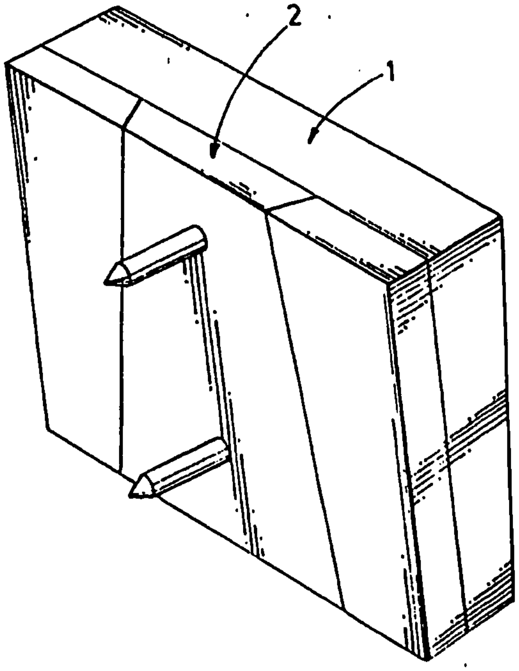


FIG.2

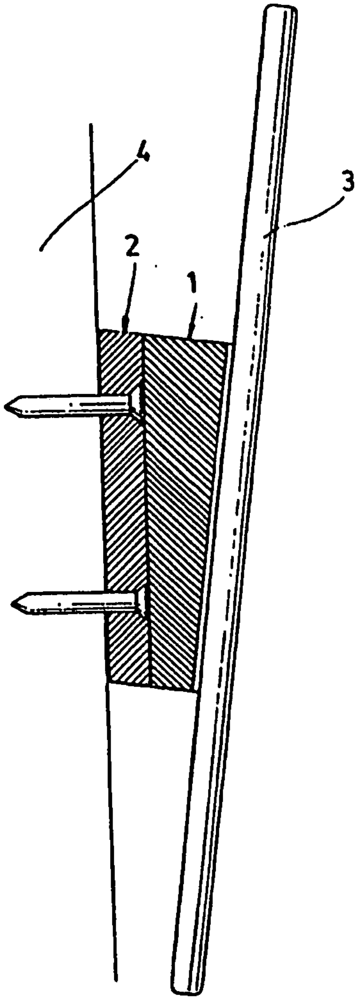


FIG.3

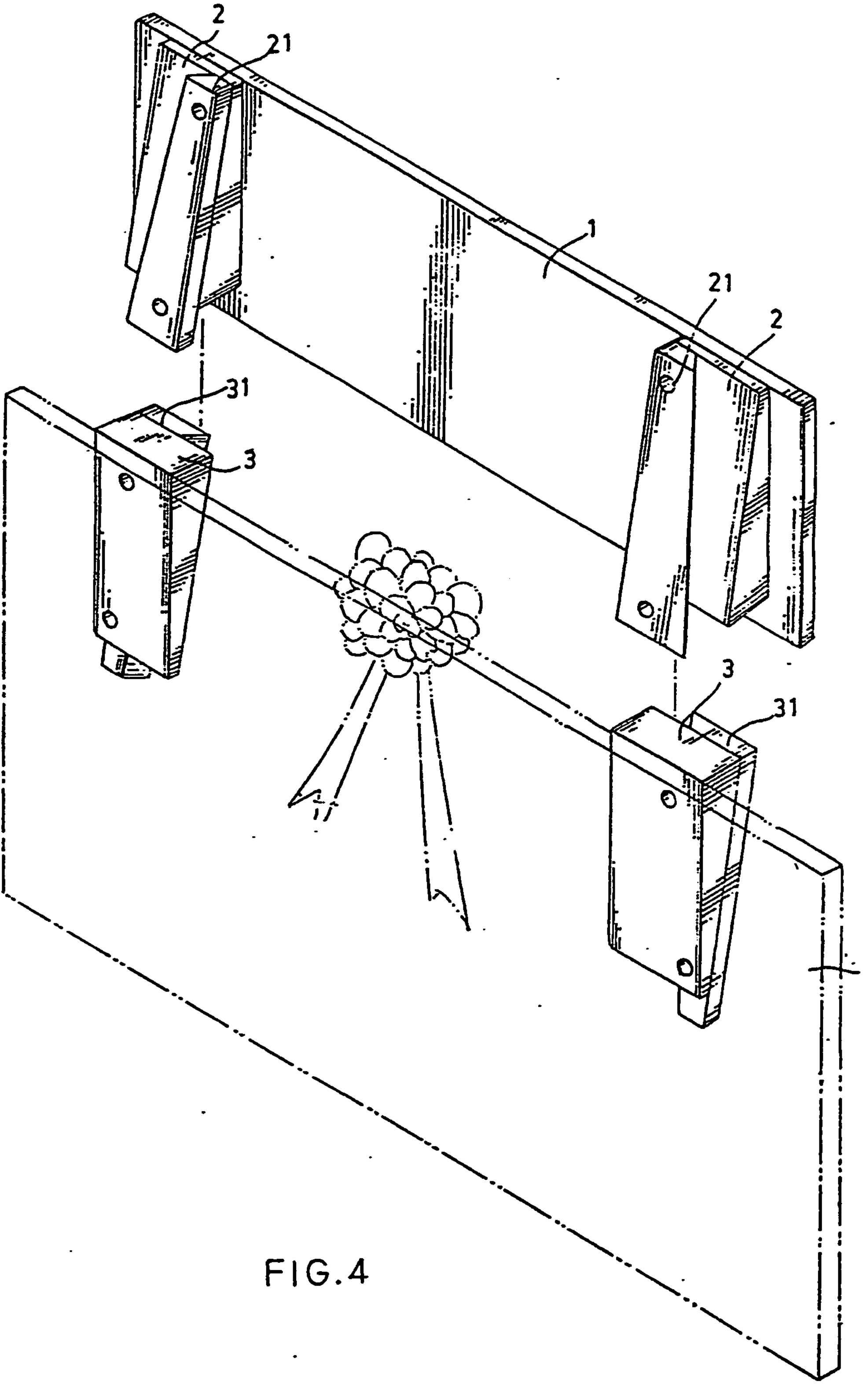


FIG.4

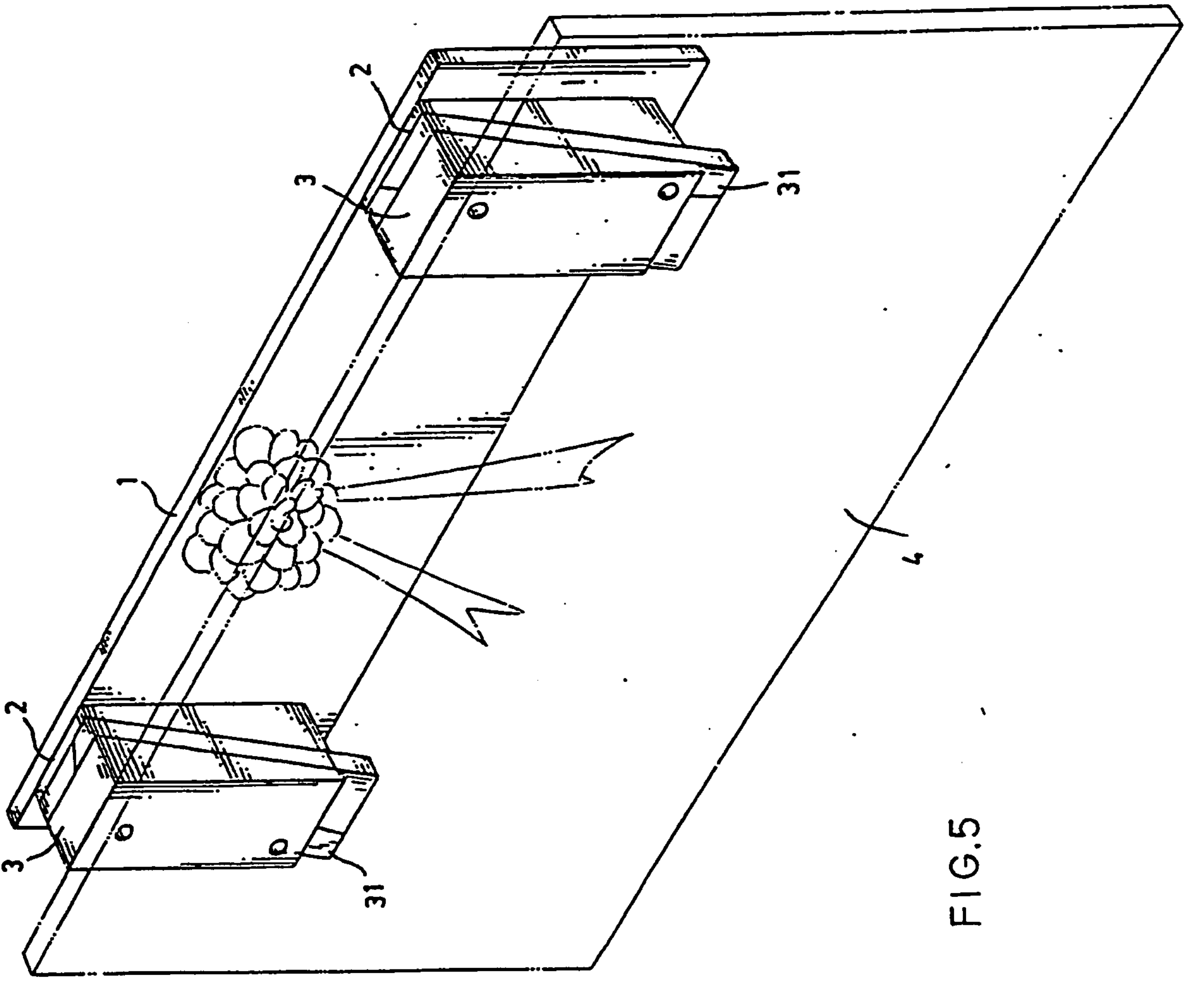


FIG.5

DOVETAILED TENON-AND-GROOVE JOINT TYPE POSITIONING MEANS

This invention relates to a dovetailed tenon-and-groove joint type positioning means.

Following economic development and continuously improving of living standard, to satisfy demand is not the only job the manufacturers shall have to do. Quality has now become another subject to attend. In the modern society, consumers are very care about the arrangement of the surroundings and indoor decoration. In order to present one's living style, one may hang a variety of articles on the wall in a house or office. For example, one may hang on the wall the tablets, pictures, paintings or some other certificates (company's license, citation etc.) for decoration or for identification. In regular method to hang a mounting frame or a wall calendar on a wall it is normally to attach a hanger ring or a hanging rope to the frame or the wall calendar to match with one or more nails which are fixed onto the wall, so as to let the frame or the wall calendar be suspended from the wall. In this method, one may encounter some problems as hereunder: (1) The nails are exposed outside to damage the wall surface and to interfere with the arrangement of indoor decoration; (2) The article which is suspending from the wall by means of a hanging rope tends to swing round due to wind force, earthquake or any impact force from others, such that position adjustment is frequently required; (3) For hanging of heavier articles such as tablet, supporting blocks must be made at the bottom to support the tablet, of which the process is rather inconvenient; (4) Nails or self-adhesive means may be insufficient to constantly support the article, and the article may drop, due to loosening of the nails or self-adhesive means, to become damaged or to cause accident; (5) The angle of inclination of the article is difficult to adjust; and (6) the article is fixedly suspended from a specific position, of which the position change to match with surroundings is not practical.

In view of said problems, the present invention is designed to provide such a dovetailed tenon-and-groove type positioning means for hanging of article which has numerous features, each of which tends to make the structure more practical and more convenient for operation.

The main object of the present invention is to provide a dovetailed tenon-and-groove joint type positioning means for suspension of article which makes use the gravity of the associated article to let the tenon-and-groove joint become more stable, of which the operation is simple and the screw means are concealed.

Another object of the present invention is to provide a dovetailed tenon-and-groove joint type positioning means for suspension of heavier article which makes use of two scarfing blocks to match with two identical scarfing blocks that are arranged in reverse direction, so as to let the gravity of the associated heavier article be evenly distributed and supported.

An embodiment of the present invention will now be described by way of example with reference to the accompanying drawings in which:

Fig. 1 is a perspective fragmentary view of the present invention;

Fig. 2 is a perspective assembly view of the present invention;

Fig. 3 is a schematic side view drawing of an embodiment according to the present invention;

Fig. 4 is a perspective fragmentary view of another embodiment according to the present invention;

Fig. 5 is a perspective assembly view of the embodiment of Fig. 4.

Referring to the various drawings attached herewith, a detailed description of the structural features of a positioning means of the present invention is as follows:-

Fig. 1 is a perspective fragmentary view of the present invention, wherein a dovetailed tenon-and-groove joint type positioning means includes a dovetailed positioning plate 2 and a grooved matched plate 1. The dovetailed positioning plate 2 has two side walls 21 respectively slanting outward. The matching plate 1 is made to provide a dovetailed sliding way 11 at its middle portion. The respectively slanting inward to serve as retainer means to tightly hold the dovetailed positioning plate 2 when the dovetailed positioning plate is set in the sliding way of the matching plate (as shown in Fig. 2).

Referring to Figs. 1 through 3, the matching plate 1 is fixedly stuck to the back side of a article 3 by means of adhesive or screw means, and the dovetailed positioning plate 2 is fixedly attached to the wall by means of screw means or the like. When in installation, the matching plate 1, which is fixedly stuck to the back side of an article 3, is mounted on the dovetailed positioning plate 2, which is fixedly attached to the wall, by aiming the wider opening 13 of the sliding way 11 at the narrower top end 22 to let the dovetailed positioning plate 2 be totally set in the dovetailed sliding way 11, such that the gravity of the suspender drives the matching plate 1 to move downward to firmly connected with the dovetailed positioning plate 2. Therefore, the article 3 is firmly suspended from the wall 4. When to remove the article 3 from the wall 4, it is simply move the article 3 vertically upward to separate the matching plate 1 from the positioning plate 2.

Please refer to another embodiment of the present invention as shown in Figs. 4 and 5, wherein a bottom block 1, which is to be fixedly attched to the wall is having two scarfing blocks 2 made at both ends of respectively match with the two scarfing blocks 3 made at the back side of a heavier article 4 or tablet or the like. The scarfing blocks 2 each has a dovetailed tenon 21 to define an outward groove so as to match with the dovetailed tenon 31 of the associated scarfing block 3, which is identical to the dovetailed tenon 31 and arranged in a reverse direction against the dovetailed tenon 31 of the associated scarfing block 3. When the article 4 is mounted on the bottom block, which is fixedly attached to the wall, the two scarfing blocks 3 are respectively connected with the two scarfing blocks 2 by means of dovetailed tenon-and-groove joint, to let the article 4 be suspending from the wall.

CLAIMS:

1. A dovetailed tenon-and-groove joint type positioning means including a dovetailed positioning plate and a grooved matching means wherein said dovetailed positioing plate is having two side walls respectively slanting outward, said matching plate being made to provide a dovetailed sliding way at the middle portion, and wherein the two side walls of said dovetailed sliding way are respectively slanting inward to serve as retainer means to tightly hold said dovetailed positioning plate when said dovetailed positioning plate is set in said sliding way of said matching means.

2. A dovetailed tenon-and-groove joint type positioning means, wherein a bottom block, which is to be fixedly attached to the wall is having two scarfing blocks made at both ends to respectively match with two identical scarfing blocks arranged in reverse direction and made at the back side of an article such that the two scarfing blocks of said bottom block are respectively connected with the two scarfing blocks of said article by means of dovetailed tenon-and-groove joint, to let said article be suspending from the wall.

3. A dovetailed tenon-and-groove joint type positioning means as claimed in claim 1, wherein the dovetailed positioning plate and the grooved matching plate are respectively made of wooden or plastic or any other suitable materials.

4. A dovetailed tenon-and-groove joint type positioning means as claimed in claim 1, wherein the groove matching plate is made to provide an angle of inclination to match with the suspension of the associated article.

5. A dovetailed tenon-and-groove joint type positioning means substantially as hereinbefore described with reference to, and as illustrated in, Fig. 1 to 3; or Figs. 4 and 5 of the accompanying drawings.

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